ESTIMATED AVOIDED ENERGY COSTS
18 C.F.R. § 292.302(b)(1)

The estimated avoided cost on the electric utility's system, solely with respect to the energy component, for various levels of purchases from qualifying facilities. Such levels of purchases shall be stated in blocks of not more than 100 megawatts for systems with peak demand of 1,000 megawatts or more, and in blocks equivalent to not more than 10 percent of the system peak demand for systems of less than 1,000 megawatts. The avoided costs shall be stated on a cents per kilowatt-hour basis, during daily and seasonal peak and off-peak periods, by year, for the current calendar year and each of the next five years.

RESPONSE:

WINTER AVERAGE AVOIDED ENERGY COST BY PERIOD (¢/kWh)

BEGIN CONFIDENTIAL

Year	Premium On-Peak Hours	Average AM On-Peak Hours	Average PM On-Peak Hours	Average Off-Peak Hours
2020				
2021				
2022				
2023				
2024				
2025				

END CONFIDENTIAL

SUMMER AVERAGE AVOIDED ENERGY COST BY PERIOD (¢/kWh)

BEGIN CONFIDENTIAL

Year	Premium On-Peak Hours	Average PM On-Peak Hours	Average Off-Peak Hours
2020			
2021			
2022			
2023			
2024			
2025			

END CONFIDENTIAL

SHOULDER AVERAGE AVOIDED ENERGY COST BY PERIOD (¢/kWh)

BEGIN CONFIDENTIAL

Year	Average On-Peak Hours	Average Off-Peak Hours
2020	[redacted]	
2021		
2022		
2023		
2024		
2025		

END CONFIDENTIAL

Notes:

1) Energy costs are expressed in nominal dollars and do not incorporate additional considerations used in rate calculations.

2) Energy price periods are per PSCSC Docket No. 2019-186-E.

HOUR DEFINITIONS

Season	Period	Days	Months	Hours
Winter	Premium	Mon – Fri [1]	Dec - Feb	6:00 am – 9:00 am
Winter	On-Peak Morning	Mon – Fri [1]	Dec - Feb	4:00 am – 6:00 am & 9:00 am – 11:00 am
Winter	On-Peak Evening	Mon – Fri [1]	Dec - Feb	6:00 pm – 10:00 pm
Winter	Off-Peak	Mon – Fri [1]	Dec - Feb	Remaining Hours + Holidays
		Sat – Sun		All Hours [2]
Summer	Premium	Mon – Fri [1]	Jun - Sept	4:00 pm – 8:00 pm
Summer	On-Peak	Mon – Fri [1]	Jun - Sept	1:00 pm – 4:00 pm & 8:00 pm – 9:00 pm
Summer	Off-Peak	Mon – Fri [1]	Jun - Sept	Remaining Hours + Holidays
		Sat – Sun		All Hours [2]
Shoulder	On-Peak	Mon – Fri [1]	Mar - May, Oct - Nov	5:00 am – 10:00 am & 5:00 pm – 11:00 pm
Shoulder	Off-Peak	Mon – Fri [1]	Mar - May, Oct - Nov	Remaining Hours + Holidays
		Sat – Sun		All Hours [2]

Notes:

1) Excludes holidays considered as off-peak (New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day).

2) When one of the above holidays falls on a Saturday, the Friday before will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

FUTURE RESOURCE ADDITIONS
18 C.F.R. § 292.302(b)(2)

The electric utility's plan for the addition of capacity by amount and type, for purchases of firm energy and capacity, and for capacity retirements for each year during the succeeding 10 years.

RESPONSE:

PROPOSED RESOURCE CAPACITY ADDITIONS

Year	Winter Capacity (MW)	Description (Date Installed)
2021	30	Energy Storage (December 2020)
2022	15	Energy Storage (December 2021)
2023	18	Energy Storage (December 2022)
2024	18	Energy Storage (December 2023)
2025	20	Energy Storage (December 2024)
2026	20 457	Energy Storage (December 2025) New Combustion Turbine (December 2025)
2027	20 457	Energy Storage (December 2026) New Combustion Turbine (December 2026)
2028	1,371	New Combustion Turbine (December 2027)
2029	1,224 913	New Combined Cycle (December 2028) New Combustion Turbine (December 2028)

Notes:

- Data Source: October 2020 Large QF Tariff (PSCSC Docket No. 2019-186-E). (Based on 2020 IRP Base Case without Carbon Policy)
- All values represent incremental MW in the year in which the resource impacts winter peak.

PROPOSED RESOURCE CAPACITY RETIREMENTS

Year	Winter Capacity (MW)	Description (Date Retired)
2021	514	Darlington 1-4, 6-8 and 10 (May 2020)
2026	68	Blewett CTs (December 2025)
	164	Weatherspoon CTs (December 2025)
2028	698	Roxboro 3 (December 2027)
	711	Roxboro 4 (December 2027)
2029	746	Mayo 1 (December 2028)
	380	Roxboro 1 (December 2028)
	673	Roxboro 2 (December 2028)

Notes:

- Data Source: October 2020 Large QF Tariff (PSCSC Docket No. 2019-186-E). (Based on 2020 IRP Base Case without Carbon Policy)
- The year is the year in which the capacity impacts the winter peak.
- All retirements are for planning purposes only.
- The date retired is the month and year that the asset is taken out of service.
- Retirement dates based on most economic retirement dates determined in the Coal Retirement Study presented in 2020 SC IRP.

PROPOSED PURCHASE CAPACITY ADDITIONS

DEP Base Renewables – Compliance + Non-Compliance Nameplate MW				
	Solar	Solar + Storage	Biomass/Hydro	Total
2021	2,822	0	284	3,106
2022	3,000	0	146	3,146
2023	3,184	0	135	3,319
2024	3,168	0	131	3,299
2025	3,232	0	131	3,363
2026	3,356	0	120	3,476
2027	3,313	0	120	3,433
2028	2,934	0	116	3,050
2029	2,568	0	60	2,628
2030	2,191	0	43	2,234

Notes:

- Data Source: October 2020 Large QF Tariff (PSCSC Docket No. 2019-186-E). (Based on 2020 IRP Base Case without Carbon Policy)
- Information presented in the year in which the capacity impacts the winter peak.
- Solar, Solar + Storage and Biomass/Hydro represent cumulative total in the year provided.
- Solar includes 0.5% per year degradation.
- Renewables capacity listed excludes REC-Only contracts.

CAPITAL AND ENERGY COSTS OF PLANNED ADDITIONS
18 C.F.R. § 292.302(b)(3)

The estimated capacity costs at completion of the planned capacity additions and planned capacity firm purchases, on the basis of dollars per kilowatt, and the associated energy costs of each unit, expressed in cents per kilowatt-hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases.

RESPONSE:

ESTIMATED CAPITAL AND ENERGY COSTS FOR PLANNED CAPACITY ADDITIONS

BEGIN CONFIDENTIAL

2021 (Dec)	15 MW Energy Storage Capacity Cost: $[redacted]/kW Energy Cost: [redacted] cents/kWh
2022 (Dec)	18 MW Energy Storage Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
2023 (Dec)	18 MW Energy Storage Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
2024 (Dec)	20 MW Energy Storage Capacity Cost: $[redacted]/kW Energy Cost: [redacted] cents/kWh
2025 (Dec)	20 MW Energy Storage Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
	457 MW Combustion Turbine Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
2026 (Dec)	20 MW Energy Storage Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
	457 MW Combustion Turbine Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
2027 (Dec)	1,371 MW Combustion Turbine Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh
2028 (Dec)	1,224 MW Combined Cycle Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh

	913 MW Combustion Turbine Capacity Cost: $[redacted]/kw Energy Cost: [redacted] cents/kWh

END CONFIDENTIAL

Notes:

- Data Source: October 2020 Large QF Tariff (PSCSC Docket No. 2019-186-E). (Based on 2020 IRP Base Case without Carbon Policy)
- Capacity (MW) reflects winter rating.
- Capacity cost based on generic unit assumptions and expressed in overnight in-service year dollars (excluding AFUDC) unless otherwise noted.
- Energy cost includes fuel and variable O&M.
- CHP energy cost includes revenues from steam sales.
- Energy Storage capital cost based on 50 MW/200 MWh Li-ion battery.
- Unit uprates greater than 20 MW are included.

ESTIMATED CAPACITY AND ENERGY COSTS FOR PLANNED FIRM PURCHASES

The undesignated renewable resource additions listed under the 292.302(b)(2) requirement involve additions of large numbers of small power producers that will be subject to capacity and energy rates that will be negotiated or in place at the time the agreements are signed.